Appendices

The four appendices are:

Appendix A: Grouping Elementary Districts by High School District
Appendix B: Grouping Elementary Districts by County
Appendix C: Grouping High School Districts by County
Appendix D: Grouping Districts and Guaranteed Tax Bases Aid

Appendices A, B and C present detailed comparisons of grouped and individual school district BASE, general fund and maximum mill levies. Appendix A groups elementary districts by high school district. Appendix B groups elementary districts by county. Appendix C groups high school districts by county.

Appendix D shows the effects of changing the guaranteed tax base aid formula for grouped districts so that the state total of guaranteed tax base aid is the same as with no grouping.

Each section begins by showing how grouping affects the overall distribution of mill levies. A graph shows the distributions of individual and grouped levies. The first table in each section shows average levies and three measures of the dispersion of the distributions. It shows the difference between the highest and lowest, the difference between the 95th and 5th percentiles, and the difference between the 75th and 25th percentiles.

If the difference between the highest and lowest is less for the grouped districts, the grouping reduces the extremes in mill levies. Five percent of districts have mill levies higher than the 95th percentile, and five percent have mill levies lower than the 5th percentile. If the difference between the 95th and 5th percentiles is less for the grouped districts, the grouping reduces the distance between the group of districts with the highest mill levies and the group with the lowest.

Half of districts have mill levies between the 25th and 75th percentiles. If the difference between the 75th and 25th percentiles is less for the grouped districts, the grouping has tightened up the center of the distribution, moving more districts close to the center.

Each section also shows how individual district's mill levies change when they are grouped. Grouping districts makes the overall distribution of mill levies tighter, but this could happen in many ways. It could happen by all or most districts moving slightly toward the center. At the other extreme, it could involve a complete shuffling of the distribution. If groups of districts generally contain districts with similar mill levies, most changes from grouping will be relatively small and the majority of districts, but not all, will move toward the center. If grouping generally combines districts with high and low mill levies, changes from grouping will be relatively large and almost all districts will move toward the center. Some districts may move past the center and go from having low mills to having high mills or vice versa.

The second table in each section divides districts into categories based on their mill levies. For each category, it shows the percent of districts whose mill levies are increased, decreased or unchanged by the grouping. This measures the extent to which districts in each category are being grouped with districts with higher or lower mill levies. If districts with high mill levies are being grouped with other high mill districts, approximately half will have higher group mills and half will have lower. If high mill districts are not being grouped together, most will have their mills decreased by grouping. Similarly, the more low mill districts are being grouped together, the more evenly they will be split between increasing and decreasing mills from grouping.

The second table also shows the percent of districts in each category that are in a group with above average group mill levy. This measures the extent to which districts with high and low mill levies are being grouped together. If most high mill districts are being grouped with low mill districts, about half of districts in each category will be in groups with above average mills and half will be in groups with below average mills. If high mill districts are being grouped together and low mill districts are being grouped together, few low mill districts will be in groups with above average mills and most high mill districts will be.

The third table gives measures of the size of mill levy changes. It gives the average change, ignoring the sign of the changes. It gives the median change. If the median is zero, half of districts increased and half decreased. If the median is positive, more than half increased. If the median is negative, less than half increased.

The third table also shows the largest increase and decrease and the range that covers the middle 50% of changes.

Appendix A: Grouping Elementary Districts by High School District

There are 283 elementary districts. Forty-seven of them are split between two or more high school districts. The other 236 are part of a single high school district. This section looks at the effect on mill levies of grouping those 236 elementary districts by high school district.

BASE Mills

Figure A-1 shows the current distribution of BASE mills for these districts and the distribution of BASE mills if they were grouped by high school district.

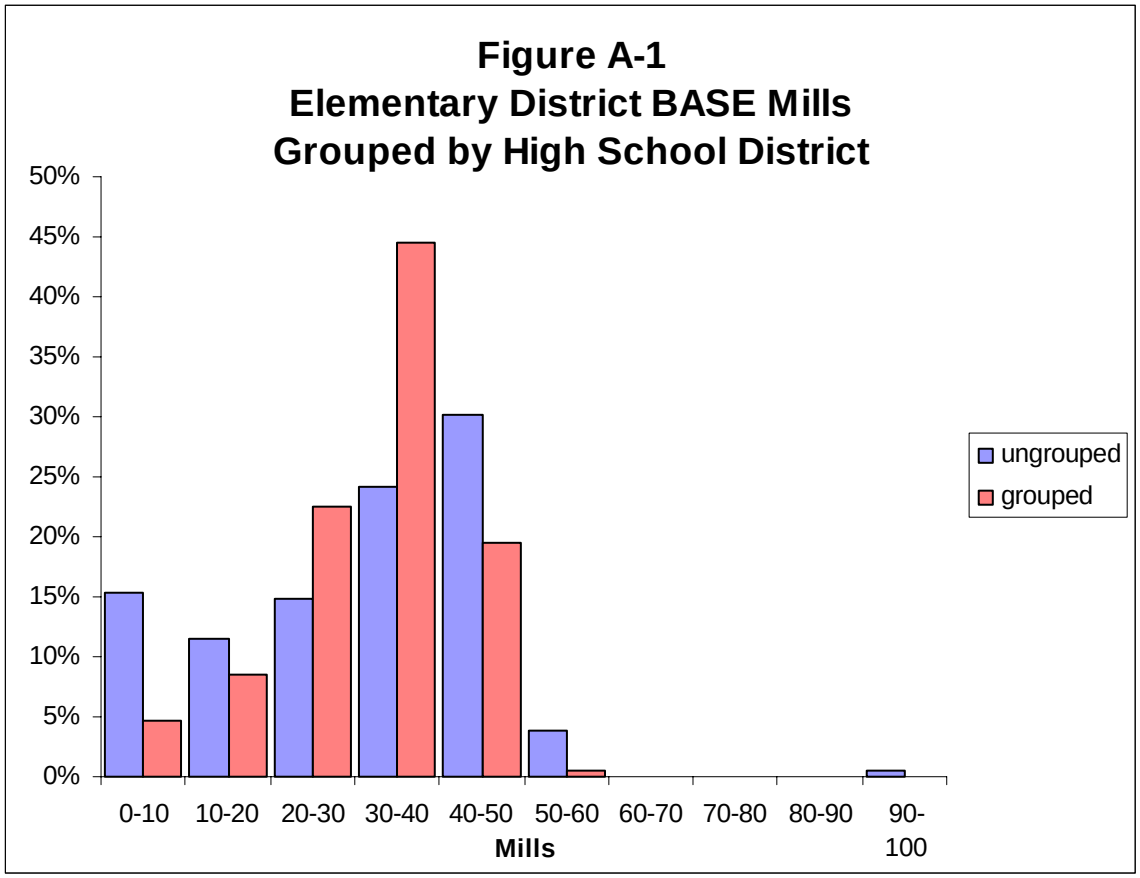


Table A-1 shows the average BASE mills and the differences between the highest and lowest, between the 95th and 5th percentiles and between the 75th and 25th percentiles. Ninety percent of the values are between the 5th and 95th percentiles, and half are between the 25th and 75th percentiles.

Table A-1
Elementary District BASE Mills
Grouped by High School District

	average	max - min	95%tile - 5%tile	75%tile - 25%tile
ungrouped	30.1	97.1	48.8	24.2
grouped	32.0	51.1	34.9	13.7

Grouping elementary districts by high school district increases average BASE mills and reduces the spread of the distribution of BASE mills. Grouping reduces the number of districts at both extremes. It reduces the fraction of districts with 50 or more BASE mills from 4.2% to 0.4%. It reduces the fraction of districts with less than 20 BASE mills from 26.7% to 13.2%.

Table A-2 divides these districts into six categories based on their actual BASE mills and shows the fraction of each group that has higher, lower or the same BASE mills when districts are grouped. It also shows the fraction of each category that has higher-than-average BASE mills when districts are grouped.

Table A-2
Changes in Elementary BASE Mills
from Grouping by High School District

BASE mills	percent higher	percent lower	percent unchanged	over average when grouped
0-10	80.6%	2.8%	16.7%	16.7%
10-20	81.5%	14.8%	3.7%	37.0%
20-30	57.1%	25.7%	17.1%	37.1%
30-40	45.6%	42.1%	12.3%	86.0%
40-50	8.5%	80.3%	11.3%	84.5%
50 and over	0.0%	90.0%	10.0%	80.0%
all districts	43.6%	44.1%	12.3%	61.9%

In general, districts with lower BASE mills are more likely to have their BASE mills increased by grouping. Districts with higher BASE mills are more likely to have their BASE mills reduced by grouping. Overall, almost the same number of districts had BASE mills increased and decreased by grouping. Twenty-nine districts had no change

in BASE mills from being grouped. Twenty-seven of these were cases where a high school district only contains one elementary district. The other two were districts with zero BASE mills that were grouped together.

Most districts with higher-than-average BASE mills are in groups with higher-than-average BASE mills, and most districts with lower-than-average BASE mills are in groups with lower-than-average BASE mills.

Table A-3 shows additional information about changes for individual districts.

Table A-3
Changes in Elementary BASE Mills
from Grouping by High School District

average change (ignoring sign)	median	largest increase	largest decrease	75%tile	25%tile
8.49	0.00	38.22	-52.60	7.51	-4.14

The average size of changes in mill levies, ignoring the direction of the change, is 8.49. The median change is 0.00. This means that the BASE levy increased or was unchanged for half of the districts and decreased or was unchanged for half of the districts. The largest changes were an increase of 38.22 mills and a decrease of 52.60 mills. Most districts had much smaller changes. Half the changes are between the 25th percentile, which is -4.14 and the 75th percentile, which is 7.51.

To summarize, grouping elementary districts by high school district reduces overall disparities in BASE mill levies. A few districts have large increases or decreases, but the majority have relatively small changes. Most districts are in a group with BASE levy that is similar to the district's own BASE levy.

General Fund Mills

Figure A-2 shows the current distribution of total general fund mills for elementary districts and the distribution of general fund mills if they were grouped by high school district and each district's general fund budget stayed the same.

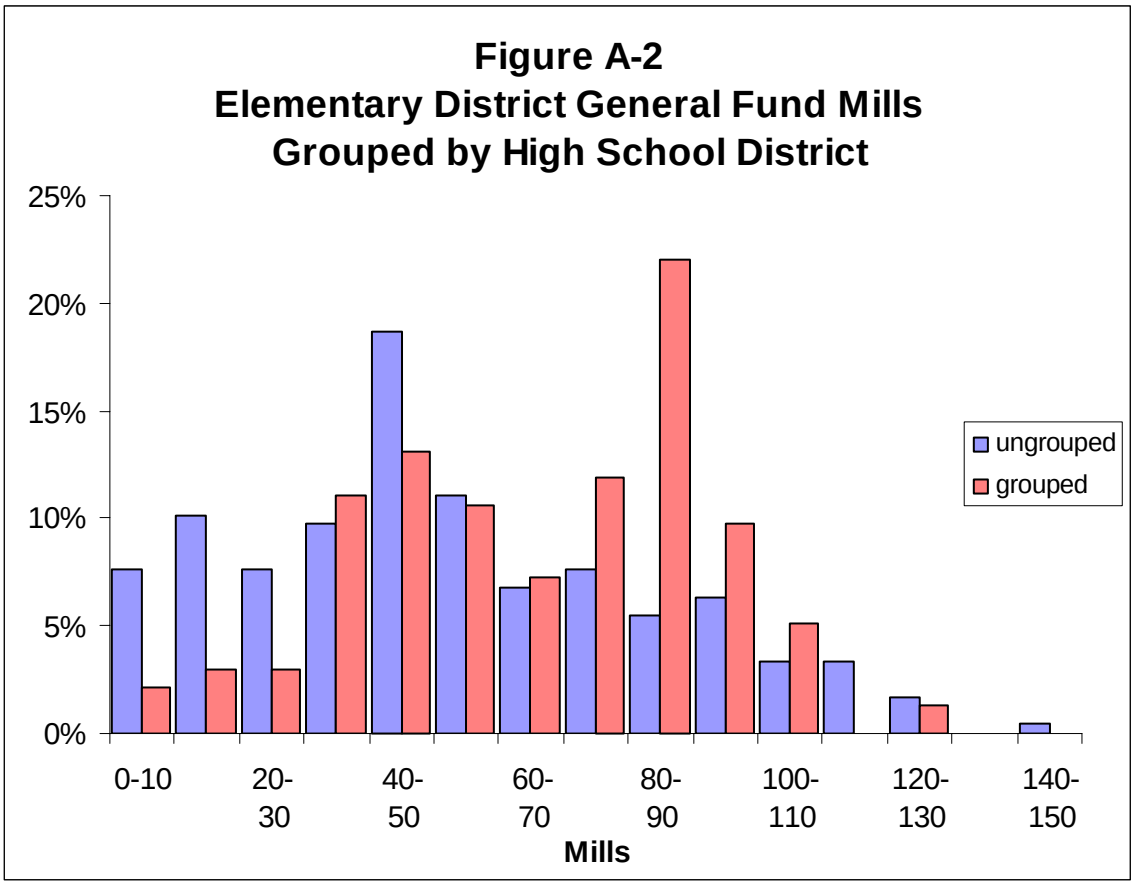


Table A-4 shows the average general fund mills and the differences between the highest and lowest, between the 95th and 5th percentiles and between the 75th and 25th percentiles.

Table A- 4
Elementary District General Fund Mills
Grouped by High School District

	average	max - min	95%tile - 5%tile	75%tile - 25%tile
ungrouped	52.6	144.7	106.5	44.2
grouped	65.6	128.6	64.8	33.7

The range of total mills is much larger than the range of BASE mills. Grouping elementary districts by highs school district would increase the average mill levy and reduce the spread of the distribution of mill levies.

Table A-5 shows, by current mill levy, the fraction of mill levies that are increased and decreased and the fraction that are in groups with mill levies that are higher than average.

Table A- 5
Changes in Elementary General Fund Mills
from Grouping by High School District

BASE mills	percent higher	percent lower	percent unchanged	over average when grouped
0-10	94.4%	5.6%	0.0%	38.9%
10-20	62.5%	25.0%	12.5%	45.8%
20-30	84.2%	5.3%	10.5%	15.8%
30-40	72.7%	13.6%	13.6%	36.4%
40-50	59.1%	22.7%	18.2%	45.5%
50-60	61.5%	23.1%	15.4%	50.0%
60-70	50.0%	37.5%	12.5%	56.3%
70-80	33.3%	50.0%	16.7%	77.8%
80-90	23.1%	61.5%	15.4%	84.6%
90-100	6.7%	93.3%	0.0%	80.0%
100 and over	4.8%	85.7%	9.5%	95.2%
all districts	54.7%	33.9%	11.4%	52.5%

In general the lower a district's mill levy, the more likely grouping is to increase it. In general, the higher a district's mill levy, the more likely grouping is to decrease it, with one significant exception. The fraction of districts whose mill levy is increased by grouping is smaller for districts with levies between 10 and 20 mills than for districts with levies of less than 10 mills or between 20 and 40 mills. In general, the higher a district's mill levy, the more likely it is to be in a group with above-average mill levy. However, this does not hold true for the districts with the lowest levies. Districts with levies of less than 20 mills are more likely to be in groups with above average mills than districts with levies between 20 and 40 mills.

Table A-6 shows the average change in general fund mills, the midpoint of the changes, the largest increase and decrease, and the 25th and 75th percentiles.

Table A-6
Changes in Elementary General Fund Mills from Grouping by High School District

average change (ignoring sign)	median	largest increase	largest decrease	75%tile	25%tile
22.16	3.70	93.30	-62.15	31.88	-3.62

The average change and the range of changes are larger for general fund mills than for BASE mills.

In general, the average change and the range of changes are larger for general fund mills than for BASE mills. As with BASE mills, the number of districts with high or low mill levies would be reduced by this grouping. However, the pattern of changes is slightly different. This is because differences in general fund mill levies reflect differences in local over-BASE spending decisions as well as differences in local resources. More districts have relatively large increases in total mills than in BASE mills. This produces a distribution of grouped mills with two peaks, a smaller one between 40 and 50 mills and a larger one between 80 and 90 mills.

Grouping districts for property tax purposes would change districts' costs of over-BASE spending. This is likely to change districts' spending decisions, which would change their mill levies. Thus, general fund levies that ultimately result from grouping districts would be different than those shown here.

Maximum Mills

Figure A-3 shows the current distribution of maximum mills for elementary districts and the distribution if they were grouped by high school district.

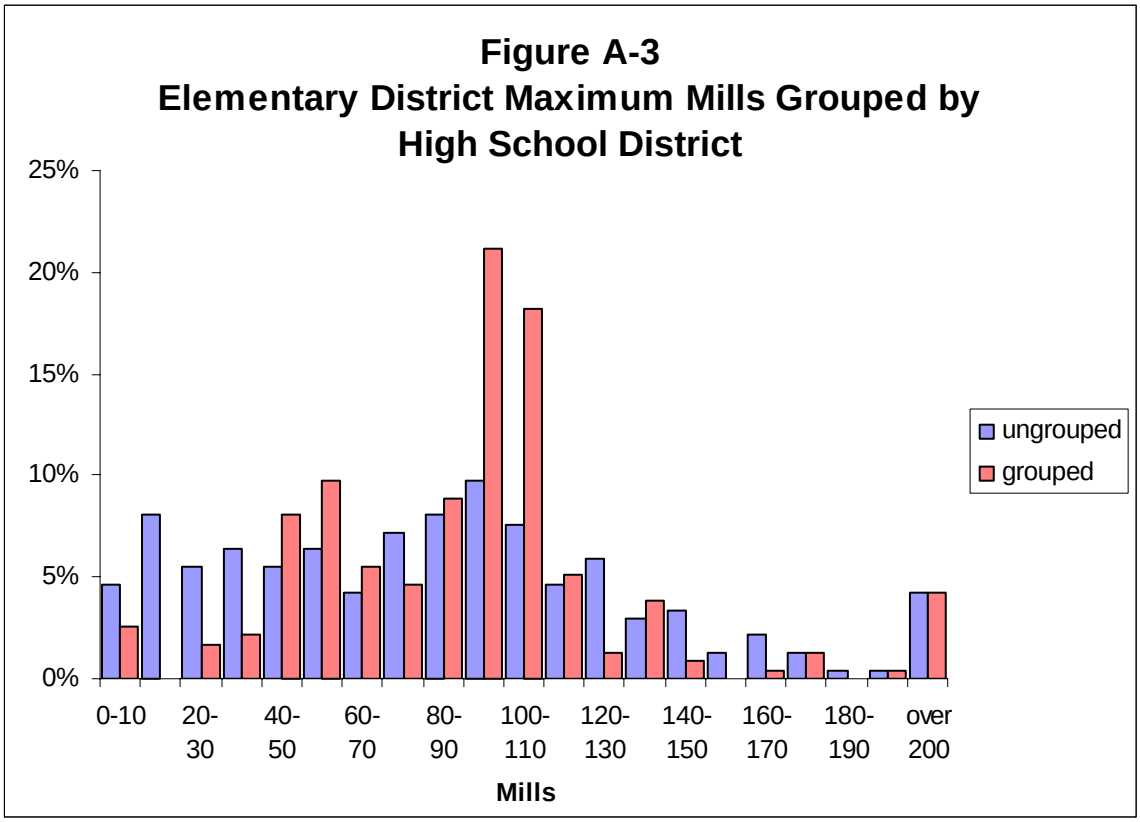


Table A-7 shows the average maximum mills and the differences between the highest and lowest, between the 95th and 5th percentiles, and between the 75th and 25th percentiles.

Table A-7
Elementary District Maximum Mills
Grouped by High School District

	average	max - min	95%tile - 5%tile	75%tile - 25%tile
ungrouped	140.2	6518.7	179.6	71.6
grouped	138.7	6518.7	141.7	41.2

The range of maximum mills is much higher than the range of BASE mills or the range of actual general fund mills. Grouping districts decreases the average maximum mill slightly and reduces the spread of the distribution.

Table A-8 shows, for categories of current mill levy, the fraction of districts where mill levies are increased, decreased or unchanged by being grouped. It also shows the fraction of districts in each category where the group mill levy is higher than the average.

Table A-8
Changes in Elementary Maximum Mills
from Grouping by High School District

BASE mills	percent higher	percent lower	percent unchanged	over average when grouped
0-20	86.7%	10.0%	3.3%	0.0%
20-40	75.0%	7.1%	17.9%	0.0%
40-60	75.0%	14.3%	10.7%	0.0%
60-80	66.7%	22.2%	11.1%	11.1%
80-100	40.5%	50.0%	9.5%	0.0%
100-120	13.8%	79.3%	6.9%	6.9%
120-140	14.3%	76.2%	9.5%	4.8%
140-160	9.1%	90.9%	0.0%	18.2%
160-180	0.0%	75.0%	25.0%	37.5%
180-200	0.0%	50.0%	50.0%	100.0%
over 200	10.0%	60.0%	30.0%	70.0%
all districts	47.5%	41.5%	11.0%	8.5%

Table A-9 shows the average change in maximum mills, the midpoint of the changes, the largest increase and decrease, and the 25th and 75th percentiles.

Table A-9
Changes in Elementary Maximum Mills
from Grouping by High School District

average change (ignoring sign)	median	largest increase	largest decrease	75%tile	25%tile
44.39	0.00	797.95	-2535.55	32.16	-9.53

In general, changes in maximum mills from grouping elementary districts by high school districts are larger than the changes in BASE mills or general fund mills. The pattern of changes in maximum mills is similar to the pattern of changes in BASE mills with one exception. This grouping does not reduce the number of elementary districts with very high maximum mill levies.

Appendix B: Grouping Elementary Districts by County

Twenty-eight elementary districts cross county lines. There are 255 that are in a single county. This section looks at the effect on mill levies of grouping these districts by county.

BASE Mills

Figure B-1 shows the current distribution of BASE mills for elementary districts and the distribution if they were grouped by county.

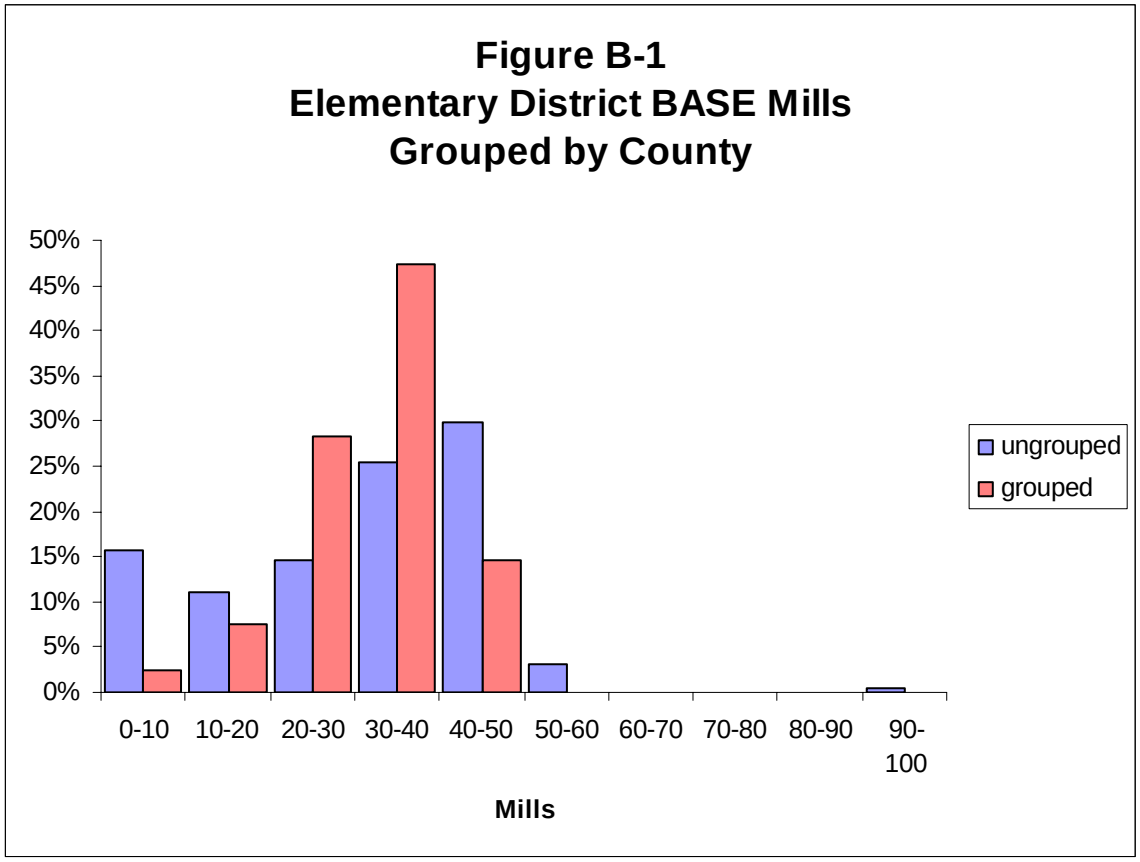


Table B-1 shows the average BASE mills and the difference between the highest and lowest, between the 95th and 5th percentiles, and between the 75th and 25th percentiles.

Table B-1
Elementary District BASE Mills
Grouped by County

	average	max - min	95%tile - 5%tile	75%tile - 25%tile
ungrouped	30.0	97.1	48.8	23.9
grouped	31.4	43.4	30.3	11.4

Table B-2 shows, for elementary districts categorized by actual BASE mills, the fraction of each category that has higher, lower or the same BASE mills when districts are grouped by county. It also shows the fraction of each category that is in a county with higher-than-average base mills.

Table B-2
Changes in Elementary BASE Mills
from Grouping by County

BASE mills	percent higher	percent lower	percent unchanged	over average when grouped
0-10	100.0%	0.0%	0.0%	20.0%
10-20	92.9%	7.1%	0.0%	46.4%
20-30	67.6%	32.4%	0.0%	32.4%
30-40	49.2%	49.2%	1.5%	76.9%
40-50	3.9%	94.7%	1.3%	76.3%
50 and over	0.0%	100.0%	0.0%	55.6%
all districts	49.4%	49.8%	0.8%	57.3%

Table B-3 shows the average change in BASE levy, the midpoint of the changes, the largest increase and decrease, and the 25th and 75th percentiles.

Table B-3
Changes in Elementary BASE Mills
from Grouping by County

average change (ignoring sign)	median	largest increase	largest decrease	75%tile	25%tile
9.62	0.00	36.16	-68.30	9.83	-7.13

Grouping elementary districts by county reduces disparities slightly more than grouping by high school district. The difference between the highest and lowest is 43.4 mills, compared to 51.1 mills. The half of the distribution in the middle (between the 25th and 75th percentiles) covers a range of 11.4 mills, compared to 13.7 mills. The average change in mills is slightly larger, at 9.62 compared to 8.49.

General Fund Mills

Figure B-2 shows the current distribution of total general fund mills for elementary districts and the distribution of general fund mills if county grouped them and each district's general fund budget stayed the same.

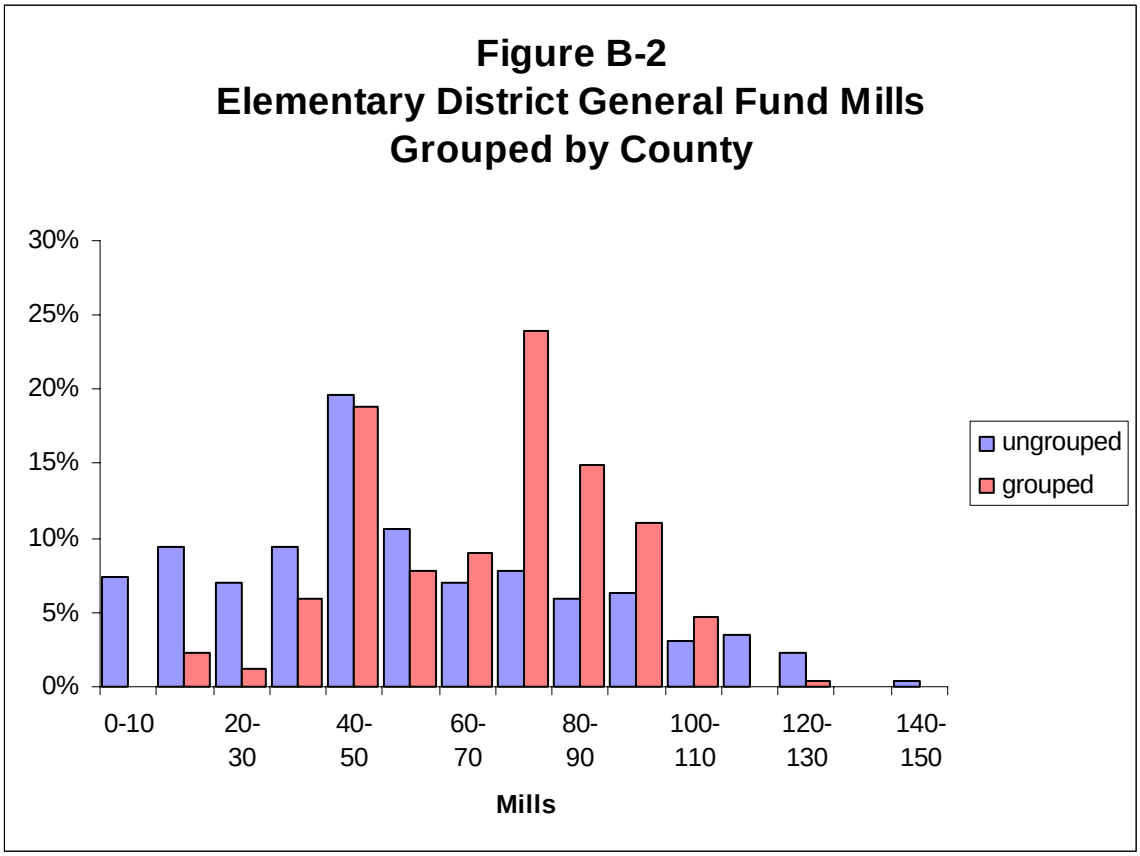


Table B-4 shows the average general fund mills and the differences between the highest and lowest, the 5th and 95th percentiles, and the 25th and 75th percentiles.

Table B-4
Elementary District General Fund Mills
Grouped by County

	average	standard deviation	max - min	95%tile - 5%tile	75%tile - 25%tile
ungrouped	53.6	32.0	144.7	106.5	44.2
grouped	67.7	21.1	106.7	64.8	33.7

Table B-5 shows, for categories of current mill levy, the fraction of mill levies that are increased and decreased and the fraction that are in counties with mill levies that are higher than average.

Table B-5
Changes in Elementary General Fund Mills
from Grouping by County

BASE mills	percent higher	percent lower	percent unchanged	over average when grouped
0-10	100.0%	0.0%	0.0%	42.1%
10-20	100.0%	0.0%	0.0%	25.0%
20-30	88.9%	11.1%	0.0%	44.4%
30-40	95.8%	4.2%	0.0%	45.8%
40-50	84.0%	16.0%	0.0%	54.0%
50-60	63.0%	37.0%	0.0%	55.6%
60-70	77.8%	22.2%	0.0%	77.8%
70-80	50.0%	50.0%	0.0%	70.0%
80-90	13.3%	86.7%	0.0%	80.0%
90-100	12.5%	87.5%	0.0%	68.8%
100 and over	4.2%	95.8%	0.0%	87.5%
all districts	66.7%	33.3%	0.0%	57.6%

Table B-6 shows the average change in general fund mills, the midpoint of the changes, the largest increase and decrease, and the 25th and 75th percentiles.

Table B-6
Changes in Elementary General Fund Mills
from Grouping by County

average change (ignoring sign)	median	largest increase	largest decrease	75%tile	25%tile
27.28	14.10	92.84	-79.83	34.40	-6.29

Grouping by counties reduces the disparities in elementary general fund mills slightly more than grouping by high school district. Most of the difference is in the districts with the lowest mills. The difference between the highest and lowest is 106.7 compared to 128.6. The middle half of the distribution covers a range of 33.7 mills with both groupings.

Maximum Mills

Figure B-3 shows the current distribution of maximum mills for elementary districts and the distribution of maximum mills if county grouped them.

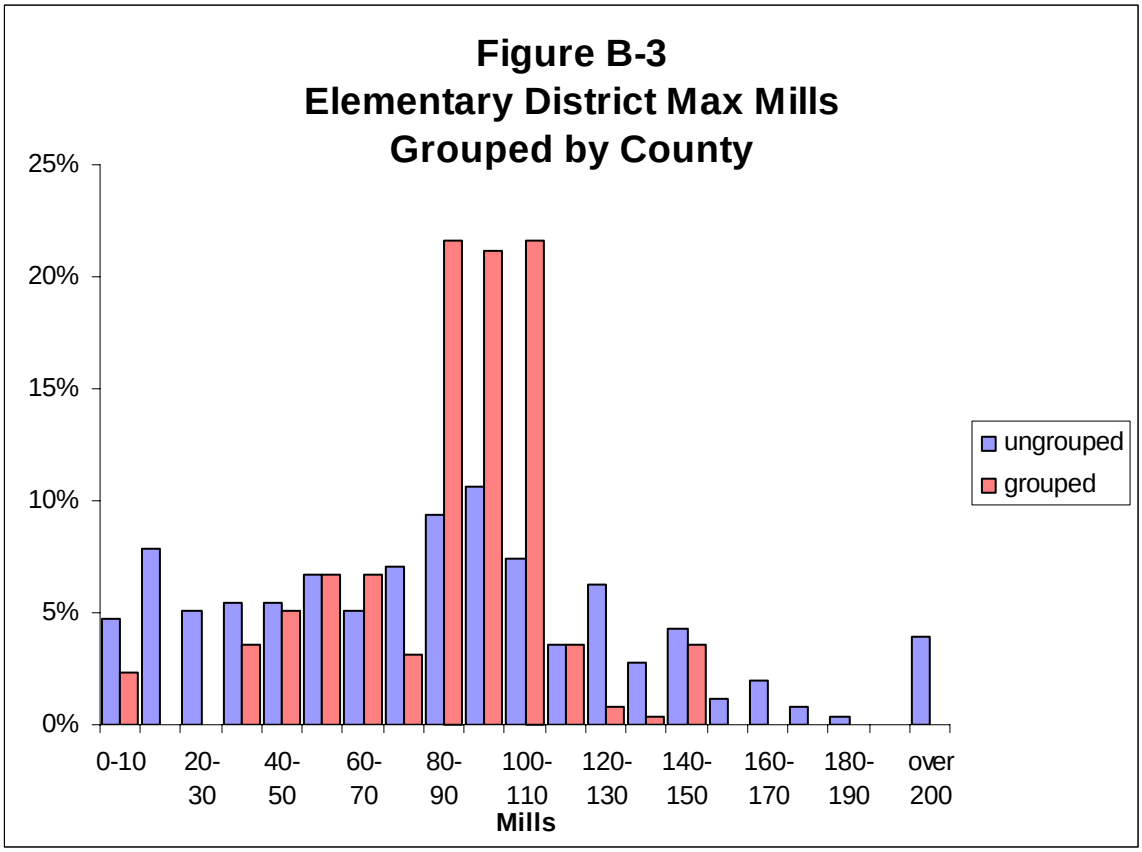


Table B-7 shows the average maximum mills, the difference between the highest and lowest, between the 95th and 5th percentiles and between the 75th and 25th percentiles.

Table B-7
Elementary District Maximum Mills
Grouped by County

	average	max - min	95%tile - 5%tile	75%tile - 25%tile
ungrouped	110.5	3502.0	160.8	66.6
grouped	86.4	137.8	79.9	31.3

Table B-8 shows, for categories of maximum mills, the fraction of mill levies that are increased and decreased by grouping and the fraction of districts that are in counties where the grouped mill levy is higher than average.

Table B-8
Changes in Elementary Maximum Mills
from Grouping by County

BASE mills	percent higher	percent lower	percent unchanged	over average when grouped
0-20	100.0%	0.0%	0.0%	43.8%
20-40	96.3%	3.7%	0.0%	40.7%
40-60	83.9%	16.1%	0.0%	32.3%
60-80	80.6%	19.4%	0.0%	48.4%
80-100	51.0%	49.0%	0.0%	64.7%
100-120	14.3%	82.1%	3.6%	82.1%
120-140	4.3%	91.3%	4.3%	69.6%
140-160	0.0%	100.0%	0.0%	92.9%
160-180	0.0%	100.0%	0.0%	71.4%
180-200	0.0%	100.0%	0.0%	100.0%
over 200	0.0%	100.0%	0.0%	70.0%
all districts	54.9%	44.3%	0.8%	58.0%

Table B-9 shows the average change in maximum mills, the midpoint of the changes, the largest increase and decrease, and the 25th and 75th percentiles.

Table B-9
Changes in Elementary Maximum Mills
from Grouping by High School District

average change (ignoring sign)	median	largest increase	largest decrease	75%tile	25%tile
6.80	4.56	105.81	-3419.12	32.96	-18.15

Grouping elementary districts by county reduces disparities in maximum mills much more than grouping by high school district. The difference between the highest and lowest maximum mills is 137.8 compared to 6518.7. Grouping by county groups the districts with the lowest tax base per student with districts with higher tax bases per student. Grouping by high school district does not. Grouping by county also compresses the middle of the distribution more. The middle half of the distribution covers a range of 31.3 compared to 41.2.

Appendix C: Grouping High School Districts by County

There are 110 high school districts in the state. Ten of them cross county lines. This section looks at the effects of grouping the remaining 100 districts by county for property tax purposes.

BASE Mills

Figure C-1 shows the current distribution of BASE mills for high school districts and the distribution of BASE mills if county grouped them.

Figure C-1
High School Base Mills
Districts Grouped by County

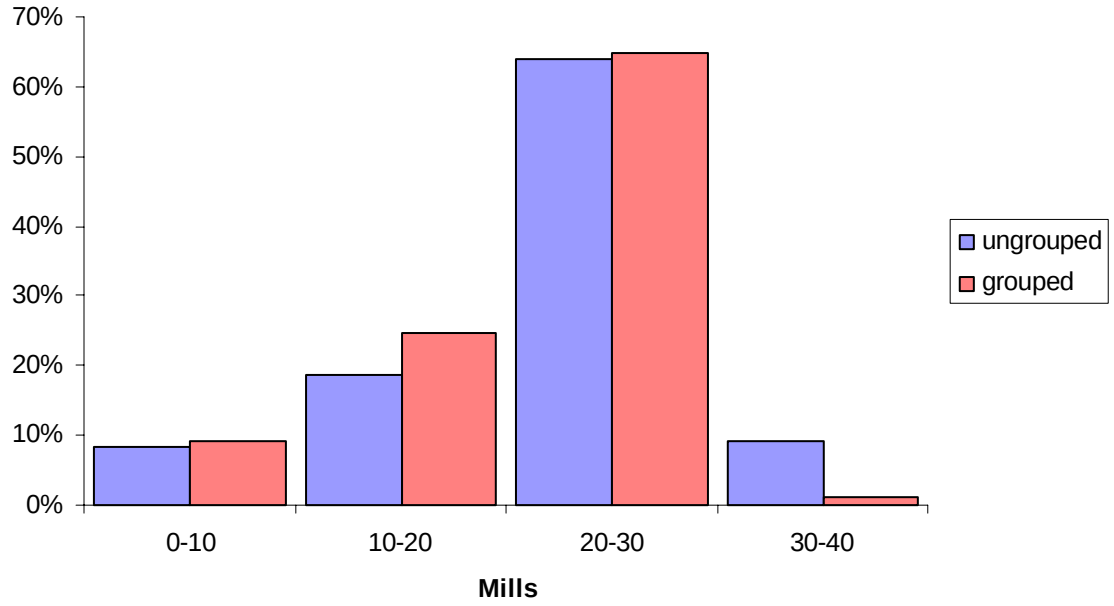


Table C-1 shows the average BASE mills, the difference between the highest and lowest, the difference between the 95th and 5th percentiles, and the difference between the 75th and 25th percentiles.

Table C-1
High School District BASE Mills
Grouped by County

	average	max - min	95%tile - 5%tile	75%tile - 25%tile
ungrouped	22.4	35.6	30.0	7.7
grouped	20.9	32.4	22.2	5.9

Table C-2 shows, for categories of current BASE mills, the fraction of districts where mill levies would increase or decrease with grouping and the fraction of districts that are in counties where the grouped levy is higher than average.

Table C-2
Changes in High School BASE Mills
from Grouping by County

BASE mills	percent higher	percent lower	percent unchanged	over average when grouped
0-10	87.5%	0.0%	12.5%	0.0%
10-20	44.4%	27.8%	27.8%	22.2%
20-30	30.6%	50.0%	19.4%	77.4%
30-50	0.0%	88.9%	11.1%	88.9%
all districts	35.1%	45.4%	19.6%	61.9%

Table C-3 shows the average change in BASE mills, the midpoint of the changes, the largest increase and decrease, and the 25th and 75th percentiles.

Table C-3
Changes in High School BASE Mills
from Grouping by County

average change (ignoring sign)	median	largest increase	largest decrease	75%tile	25%tile
4.08	0.00	13.81	-26.19	1.20	-3.12

Grouping high school districts by county reduces disparities in BASE mill by moving most districts toward the average. However, the change is relatively small. The average change in a district's BASE mills is 4.08. The most pronounced change in the distribution is that the percentage of districts with over 30 BASE mills decreases from 9.3% to 1.0%.

General Fund Mills

Figure C-2 shows the current distribution of total general fund mills for high school districts and the distribution of general fund mill levies if county grouped the districts and each district's general fund budget stayed the same.

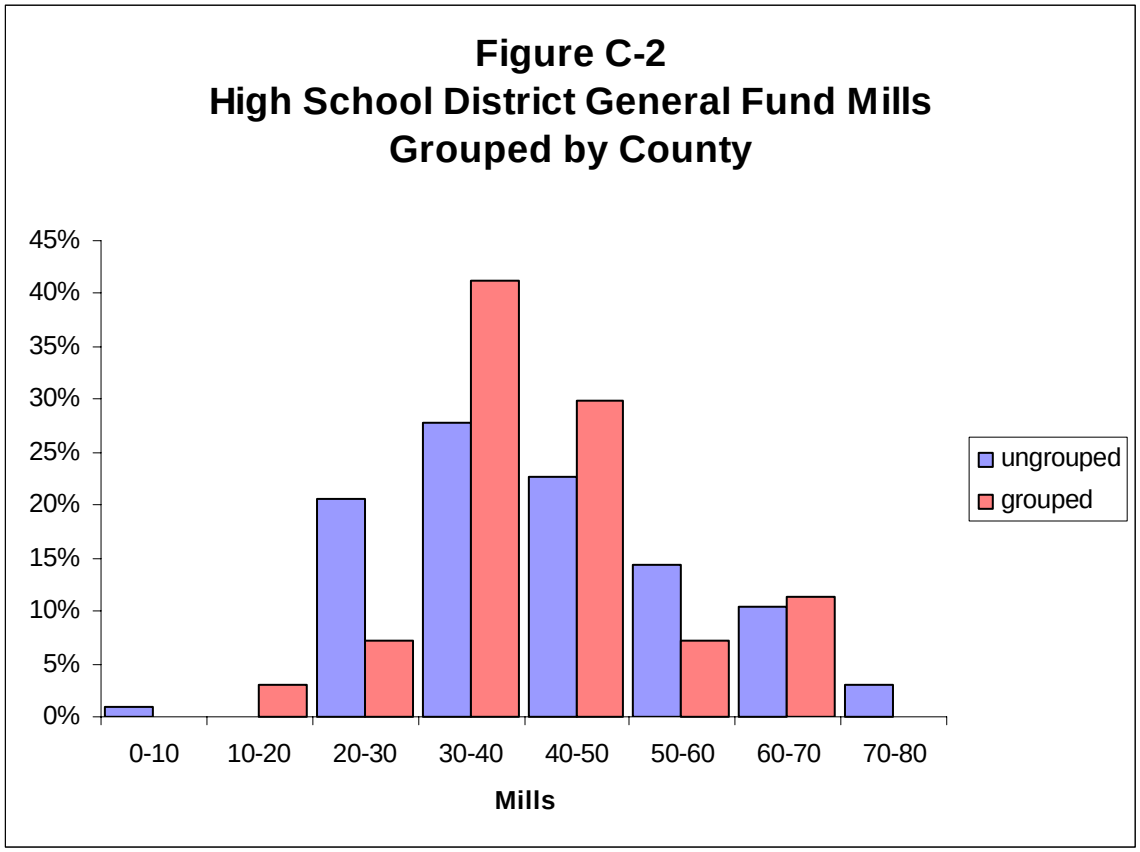


Table C-4 shows the average general fund mills and the differences between the highest and lowest, between the 5th and 95th percentiles, and between the 25th and 75th percentiles.

Table C-4
High School District General Fund Mills
Grouped by County

	average	max - min	95%tile - 5%tile	75%tile - 25%tile
ungrouped	42.4	70.1	46.7	20.8
grouped	40.6	56.3	41.1	14.0

Table C-5 shows, for categories of current mill levy, the fraction of general fund levies that would increase, decrease, or stay the same if county grouped high school districts. It also shows the fraction of districts that are in a county where the grouped levy is higher than average.

Table C-5
Changes in High School General Fund Mills
from Grouping by County

General Fund Mills	percent higher	percent lower	percent unchanged	over average when grouped
0-10	100.0%	0.0%	0.0%	0.0%
10-20	-	-	-	-
20-30	85.0%	15.0%	0.0%	5.0%
30-40	66.7%	33.3%	0.0%	37.0%
40-50	27.3%	72.7%	0.0%	54.5%
50-60	21.4%	78.6%	0.0%	64.3%
60-70	0.0%	100.0%	0.0%	90.0%
70-80	0.0%	100.0%	0.0%	33.3%
all districts	46.4%	53.6%	0.0%	43.3%

Table C-6 shows the average change in general fund mills, the midpoint of the changes, the largest increase and decrease, and the 25th and 75th percentiles.

Table C-6
Changes in High School General Fund Mills
from Grouping by County

average change (ignoring sign)	median	largest increase	largest decrease	75%tile	25%tile
8.15	0.00	29.54	-41.82	5.37	-4.21

Grouping high school districts by county reduces disparities in general fund mills by compressing the middle of the distribution and by eliminating some of the extremes. No grouped districts have levies of less than 10 mills or more than 70 mills.

As with elementary districts, high school districts probably would change their over-BASE spending in response to grouping. This would change their mill levies from the ones shown here.

Maximum Mills

Figure C-3 shows the current distribution of maximum mills for high school districts and the distribution if county grouped them.

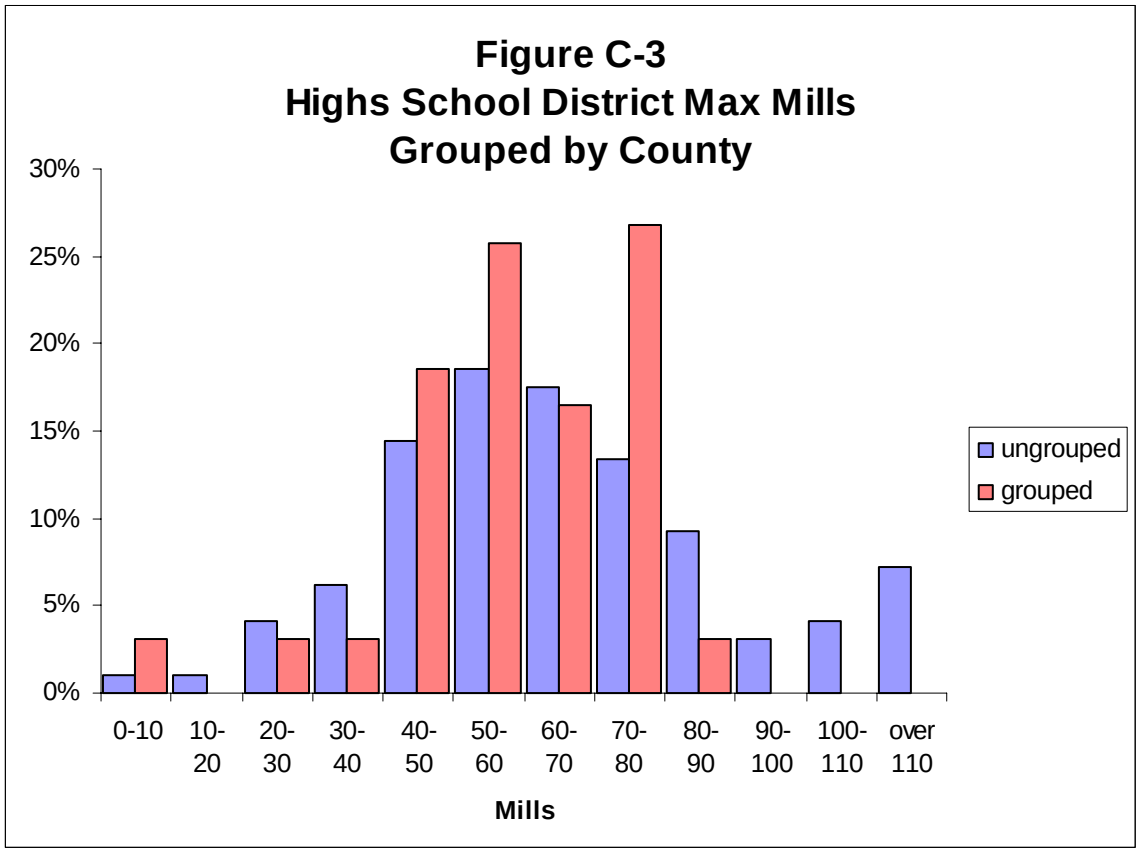


Table C-7 shows, for ungrouped and grouped high school districts, the average maximum mills and the differences between the highest and lowest, between the 95th and 5th percentiles, and between the 75th and 25th percentiles.

Table C-7
High School District Maximum Mills
Grouped by County

	average	max - min	95%tile - 5%tile	75%tile - 25%tile
ungrouped	130.1	3459.1	144.6	28.1
grouped	58.0	80.0	50.3	21.2

Table C-8 shows, for categories of maximum mill levy, the fraction of maximum levies that increased, decreased or stayed the same with grouping. It also shows the fraction of districts that are in a county where the grouped levy is higher than average.

Table C-8
Changes in High School Maximum Mills
from Grouping by County

BASE mills	percent higher	percent lower	percent unchanged	over average when grouped
0-20	100.0%	0.0%	0.0%	0.0%
20-40	80.0%	0.0%	20.0%	10.0%
40-60	53.1%	18.8%	28.1%	46.9%
60-80	26.7%	56.7%	16.7%	80.0%
80-100	0.0%	75.0%	25.0%	75.0%
100-120	0.0%	100.0%	0.0%	100.0%
over 120	0.0%	100.0%	0.0%	66.7%
all districts	36.1%	44.3%	19.6%	59.8%

Table C-9 shows the average change in maximum mills, the midpoint of the changes, the largest increase and decrease, and the 25th and 75th percentiles.

Table C-9
Changes in High School Maximum Mills
from Grouping by High School District

average change (ignoring sign)	median	largest increase	largest decrease	75%tile	25%tile
80.58	0.00	27.87	-3380.27	5.51	-17.58

Grouping high school districts by county reduces disparities in maximum mills by moving most districts closer to the average and by greatly reducing maximum mills for districts with the highest maximum levies. The highest current maximum levy is 3460 mills. No grouped maximum levy is over 90 mills.

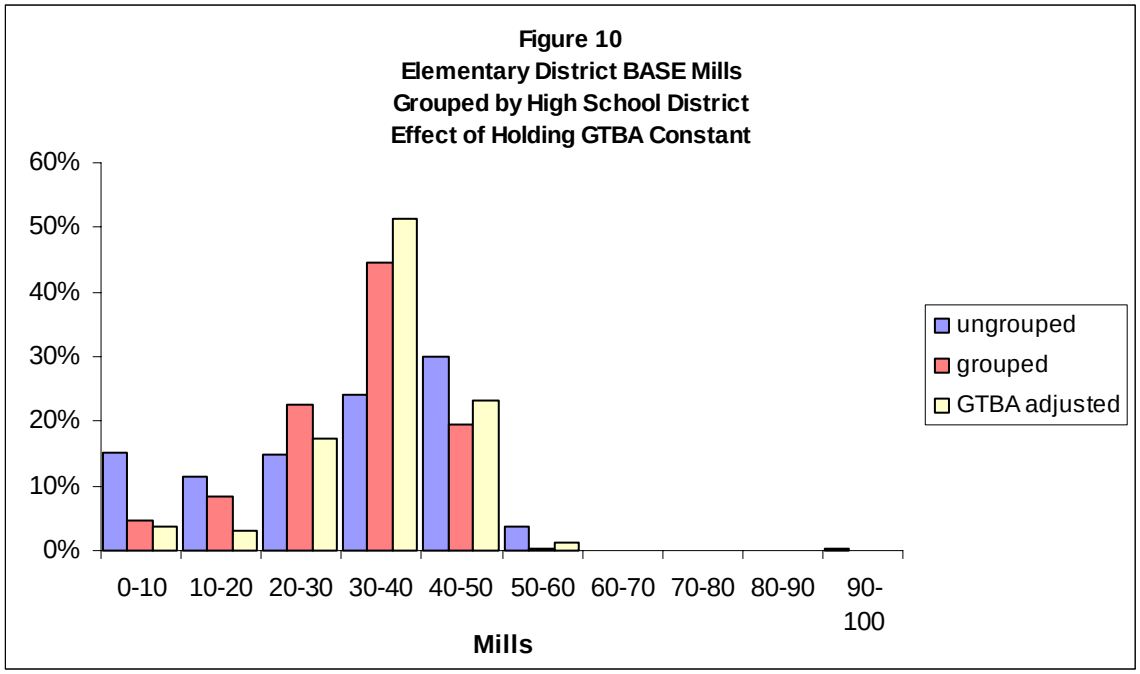
Appendix D: Grouping Districts and Guaranteed Tax Base Aid

Guaranteed Tax Base Aid (GTBA) is allocated to districts using a formula based on the ratio of the district's taxable value to the part of the BASE budget not funded by direct state aid. Districts where this ratio is less than 175% of the statewide average receive GTBA, and districts with a lower ratio receive more GTBA.

GTBA takes the form of a subsidy per mill that a district levies to fund its BASE budget. For an elementary district, this subsidy brings revenue per mill up to what it would be if the district's tax base were 17.70 times the part of its BASE budget not funded by direct state aid. For a high school district, GTBA raises revenue per mill to what it would be if the district's tax base were 27.87 times the part of its BASE budget not funded by direct state aid.

The preceding analysis has assumed that groups of districts would receive GTBA equal to the total currently received by the districts in the group. This generally will not be the case using the current GTBA formula. Except where there is only one district in a group or all districts in a group have the same mills now, grouping districts will change their mill levies. Every district where the mill levy changes will receive a changed GTBA subsidy. It will only be by chance that the changed GTBA subsidies add up to the same total as the old subsidies. For the state as a whole, total GTBA with grouped districts is more than total current GTBA.

Any change to the GTBA formula will change mill levies. Figure D-1 shows how elementary BASE levies change in response to one change in the formula. It shows the same information as Figure A-1 and adds the distribution of BASE mills with the GTBA formula adjusted to hold the statewide total of GTBA constant.



Compared to the case with districts grouped and GTBA held constant at the district level, there are fewer districts with low mills and most districts have higher mills. All districts that receive GTBA receive less when the total is held constant. Thus they must levy more mills when the GTBA formula is adjusted to hold GTBA constant. Changing the GTBA formula in other ways would produce different changes in the distribution of mill levies.